COMEBACK BAY WATER ASSOCIATION (PWSNO 1090022) SOURCE WATER ASSESSMENT REPORT

August 5, 2002



State of Idaho Department of Environmental Quality

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Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the act. This risk assessment is based on a land use inventory in the well recharge zone, sensitivity factors associated with how the well was constructed, and aquifer characteristics. Final rankings are specific to a particular category of contaminants.

This report, *Source Water Assessment for Comeback Bay Water Association*, describes factors contributing to the final susceptibility scores for Comeback Bay Water Association. Taken into account with local knowledge and concerns, it should be used as a planning tool to develop and implement appropriate protection measures for this public water system. The results should <u>not be</u> used as an absolute measure of risk and they should <u>not be</u> used to undermine public confidence in the water system.

Comeback Bay Water Association drinking water is supplied by two wells drawing from a small aquifer in the vicinity of Sagle, Idaho. The system currently serves 14 residential connections in a neighborhood east of Sagle Slough. Historically, Comeback Bay Water Association has had few water quality problems. A ground water Susceptibility Analysis conducted by DEQ April 17, 2002 found the North Well to be at high risk of synthetic and volatile organic chemical contamination because of a generator and associated fuel storage in the pump house. The risk of microbial and inorganic chemical contamination is low. The South Well ranked in the low susceptibility category relative to all classes of regulated contaminants.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

Comeback Bay Water Association already has some important protections for its wells in place. Each well is located in a locked pump house with a concrete floor. The maintenance and operation of the system is mostly in compliance with *Idaho Rules for Public Drinking Water Systems*. A sanitary survey of the system on June 26, 2001 noted the necessity of installing a secondary containment structure around the standby generator in the north pump house to protect the well from an accidental spill of fuel or lubricants.

Because the Association may not have direct jurisdiction over the entire recharge zones delineated for its wells, it will be important to form partnerships with neighboring landowners, businesses and state and local agencies to protect the ground water in the Sagle aquifer.

Due to the time involved with the movement of ground water, source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. For assistance in developing protection strategies, please contact the Coeur d'Alene Regional office of the Department of Environmental Quality or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR COMEBACK BAY WATER ASSOCIATION

Section 1. Introduction - Basis for Assessment

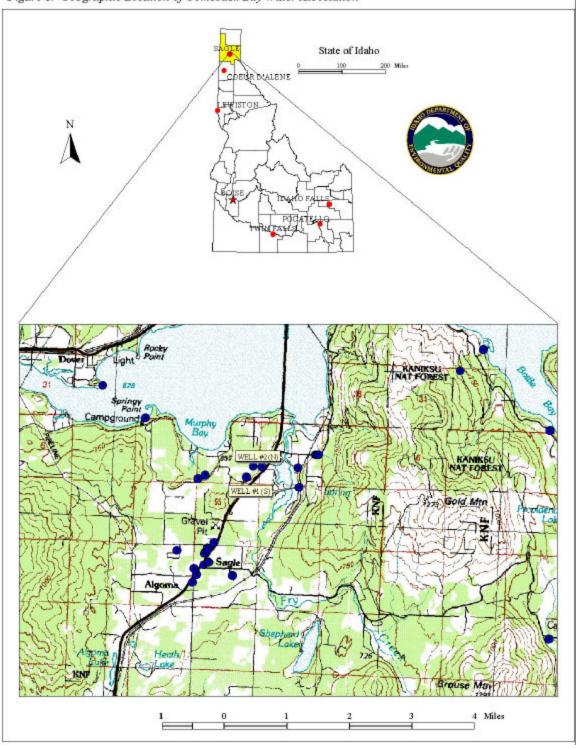
The following sections contain information necessary for understanding how and why this assessment was conducted. It is important to review this information to understand what the ranking of this source means. A map showing the delineated source water assessment area and an inventory of significant potential sources of contamination identified within that area are included. The ground water susceptibility analysis worksheets used to develop this assessment are attached.

Level of Accuracy and Purpose of the Assessment

The Idaho Department of Environmental Quality (DEQ) is required by the U.S. Environmental Protection Agency (EPA) to assess every public drinking water source in Idaho for its relative susceptibility to contaminants regulated by the Safe Drinking Water Act. These assessments are based on a land use inventory inside the delineated recharge zones, sensitivity factors associated with how the well is constructed, and aquifer characteristics. The state must complete more than 2900 assessments by May of 2003. Because resources and the time available to accomplish assessments are limited, an in-depth, site-specific investigation for every public water system is not possible.

The results of the source water assessment should <u>not be</u> used as an absolute measure of risk and they should <u>not be</u> used to undermine public confidence in the water system. The ultimate goal of this assessment is to provide data to local communities for developing a protection strategy for their drinking water supply. The Idaho Department of Environmental Quality recognizes that pollution prevention activities generally require less time and money to implement than treating a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a source water protection program should be determined by the local community based on its own needs and limitations. Wellhead or source water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Figure 1. Geographic Location of Comeback Bay Water Association



Section 2. Preparing for the Assessment

Defining the Zones of Contribution - Delineation

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the well recharge area into time of travel zones indicating the number of years necessary for a particle of water to reach a well. DEQ used a refined computer model approved by the EPA to determine the time of travel (TOT) for the water public water systems pump from the Sagle aquifer. The computer model used data DEQ assimilated from a variety of sources including local well logs and the report *Steady State Simulation of Nutrient and Contaminant Transport in the Southside Aquifer Near Sagle, Idaho* prepared by J-U-B Engineers, Inc. for Southside Water and Sewer District.

The Comeback Bay Water Association community water system serves 14 residential connections in a neighborhood east of Sagle Slough. (Figure 1). Two wells pumping from the Sagle Aquifer supply drinking water for the Association's customers. The North Well was drilled in1973 to a depth of 220 feet. The lower portion of the well reportedly caved in, reducing the depth to 130 feet. The South Well was drilled in 1971 and is 129 feet deep. Both wells are completed in granular soils lying beneath a thick clay deposit. The estimated capacity of the North Well is 15 gpm and of the South Well is 20 gpm.

The well recharge zone delineated for the Comeback Bay Water Association North Well covers 4.2 acres divided into 0-3, 3-6 and 6-10-year time of travel zones. The recharge zone for the South Well extends over 3.5 acres. The primary direction of ground water flow is from south to north (Figure 2).

Identifying Potential Sources of Contamination

The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. Inventories for public water systems in Idaho were conducted in two-phases. The first phase involved identifying and documenting potential contaminant sources inside individual source water assessment areas through the use of computer databases and Geographic Information System maps developed by DEQ. The maps and inventory lists were then sent to system operators for verification and correction in the second or enhanced part of the inventory process.

Figure 2, *Comeback Bay Water Association Delineation and Potential Contaminant Inventory* on page 7 of this report shows the location of the Comeback Bay Water Association wells, the zones of contribution DEQ delineated, and potential contaminant sites located in the vicinity. Land use inside the delineation boundaries is suburban residential.

Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. When a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the <u>potential</u> for contamination exists due to the nature of the business, industry, or operation.

Section 3. Susceptibility Analysis

The susceptibility to contamination of all groundwater sources in Idaho is being assessed on the following factors:

- physical integrity of the well,
- hydrologic characteristics,
- land use characteristics, and potentially significant contaminant sources
- historic water quality

The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. A high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. The following summaries describe the rationale for the susceptibility ranking. The Susceptibility Analysis Worksheets in Attachment A show in detail how the Comeback Bay Water Association wells scored.

Well Construction

Construction methods directly affect the ability of a well to protect the aquifer from contaminants. Lower scores imply a well that can better protect the water. This portion of the susceptibility analysis relies on information from individual well logs and from the most recent sanitary survey of the public water system. The well logs for Comeback Bay Water Association are on file with DEQ. The last Sanitary Survey of the system was in June 2001.

The Comeback Bay Water Association North Well was drilled in 1973 to a reported depth of 220 feet. The 6-inch steel casing extends from 8 inches above the pump house floor to a depth of 214 feet. A stainless steel well screen is set from 215 to 220 feet. The surface seal is 19 feet deep, terminating in a layer of mixed clay and fine sand. There is a clay stratum between 31 and 193 feet below the surface. A cave in is reported to have reduced the depth of the well to 130 feet.

The South Well was drilled in 1971 to a depth of 129 feet. The casing extends from 14 inches above the pumphouse floor to the full depth of the well with perforations between 124 and 128 feet below the surface. The casing passes through a clay bed extending from 43 to 124 feet below ground level. The surface seal is 18 feet deep, terminating in an unstratified mixture of gravel and clay. Current Idaho Department of Water Resources (IDWR) regulations require the surface seal to extend into the clay stratum if one is present. Artesian pressure raises the static water level in both wells to 4 feet below ground.

116 3130 WELL #2 (N) 48 13'30 * = * WELL #1 (S) 116°32" 116 3130 1000 2000 Feet 1000 Legend Time of Travel Zones SARA TEL III SE (EPCRA) 2 - 6 Year PWS # 1090022 Comeback Bay Water Association RED ES SEA Wastewater Louis App. Ske Well #1 (S) and Well #2 (N)

Pigure 2. Comeback Bay Delineation and Potential Contaminant Inventory.

Hydrologic Sensitivity

The hydrologic sensitivity scores for the Comeback Bay Water Association wells are 2 points out of 6 points possible. This score reflects natural geologic conditions in the recharge zone as a whole and at the well sites. Information for this part of the analysis is derived from the soil classification inside the delineation boundaries and from the soil profile reported on the well log. Soils in the capture zones delineated for the Comeback Bay Water Association wells are generally poorly drained to moderately well drained. Poorly drained to moderately well drained soils are deemed more protective of ground water than soils which drain faster.

At both well sites there is a relatively shallow layer (21 to 31 feet) of permeable soil, then a thick clay bed over the main water-bearing stratum. This deep continuous clay layer protects the ground water from vertical transport of contaminants.

Potential Contaminant Sources and Land Use

Land use inside the Comeback Bay Water Association well recharge zone is suburban residential. Exact locations of homes and any septic system components relative to the wells is not documented in the public water system file for Comeback Bay. A rail line passes about 200 feet east of the North Well and crosses the 0-3 year time of travel zone delineated for the South Well.

Table 1. Comeback Bay Water Association Potential Contaminant Inventory

SITE DESCRIPTION	POTENTIAL	TIME OF TRAVEL	SOURCE OF		
	CONTAMINANTS ¹	ZONE	INFORMATION		
Railroad	IOC, SOC, VOC,	0-3 Year TOT for South	Geological Survey Maps		
	Microbial	Well			

¹ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Historic Water Quality

Historically, Comeback Bay Water Association has had few water quality problems. In the period from November 1993 through February 2002 no monthly sample tested positive for bacteria. Chemical and radiological test results for Comeback Bay are summarized on the table below.

Table 2. Comeback Bay Water Association Test Results

		P	rima	ry IOC Conta	amiı	nants (Mandat	ory Test	ts)			
Contaminant	MCL (mg/l)	Results (mg/l)	Dates			Contaminant	MCL (mg/l)	Results (mg/l)		Dates	
Antimony	0.006	ND	5/31/	/95 to 8/28/01		Nitrate	10				
Arsenic	0.01	ND	5/31/	/95 to 8/28/01		Nickel	N/A	ND		5/31/95 to 8/28/01	
Barium	2.0	0.02	12/2	2/98		Selenium	0.05	ND		5/31/95 to 8/28/01	
Beryllium	0.004	ND	5/31/	/95 to 8/28/		Sodium	N/A	3.9 TO 8.1		5/31/95 to 8/27/01	
Cadmium	0.005	ND	5/31/	/95 to 8/28/01		Thallium	0.002	ND		5/31/95 to 8/28/01	
Chromium	0.1	ND	5/31/95 to 8/28/01			Cyanide	0.02	ND		5/31/95 to 8/28/01	
Mercury	0.002	ND	5/31/	/95 to 8/28/01		Fluoride	4.0	ND		5/31/95 to 8/28/01	
Secondary and Other IOC Contaminants (Optional Tests)											
Contaminar	Contaminant Recommended				R				Dates		
	Maximum (mg/l)										
Sulfate	11fate 6.6 to 8.3						2/1/97 to 8/27/01				
		Regula	ated a	nd Unregula	ted	Synthetic Org	anic Ch	emic	als		
Contaminant					Results		Dates				
29 Regulated and 13 Unregulated Synthetic Organic Compounds				None Detected 9/16/95 to 8/28/01				/95 to 8/28/01			
		Regul	ated	and Unregula	ated	Volatile Orga	nic Che	mica	ls		
Contaminant					Results				Dates		
21 Regulated And 16 Unregulated Volatile Organic Compounds				None Detecte	ed 9/16/95 to 8/28			/95 to 8/28/01			
Radiological Contaminants											
Contaminant MCL		L	Results		Dates						
Gross Alpha, Including Ra & U		15 pC/l 4.0) pC/l (Well #1)			6/15/93				
		0.8 to		to 2.6 pC/l (Distribution		n)	2/1/97 to 8/27/01				
Gross Beta Particle Activity 4 1		4 m	rem/year	ar 1.9 mrem (Well #1		#1)		6/15/93			
		1.		1.6	6 mrem (Distribution)			12/9/96			
					1.7, 2.0 pCl (Distribution)			8/27/01			

Final Susceptibility Ranking

The Comeback Bay Water Association North Well automatically ranked highly susceptible to synthetic and volatile organic chemical contamination because of the backup generator and associated fuel storage in the pump house. The North Well susceptibility ranking relative inorganic and microbial contaminants is low. The South Well has a low susceptibility to contamination. Final scores and ranking relative to each class of contaminant are summarized on Table 3. The complete analysis worksheets for the wells are in Attachment A.

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.2)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

The final ranking categories are as follows:

- 0 5 Low Susceptibility
- 6 12 Moderate Susceptibility
- > 13 High Susceptibility

Table 3. Summary of Comeback Bay Water Association Susceptibility Evaluation

Final Susceptibility Scores/ Ranking							
	IOC	VOC	SOC	Microbial			
North Well	4/Low	*High	*High	4/Low			
South Well	5/Low	5/Low	5/Low	5/Low			

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Section 4. Options for Source Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

Comeback Bay Water Association already protects the wellheads by having them enclosed in locked pumphouses. The system is for the most part operated and maintained in compliance with *Idaho Rules for Public Drinking Water Systems*. Providing secondary containment for the generator and associated fuel and lubricants in the North Well pumphouse to protect the well from spills should be a priority for the system. Screening the casing vents on both wells and sealing the submersible wires on the South Well are also important since these openings can provide a direct conduit into the ground water for surface contaminants.

In its own service area and in the capture zone for the wells, the system should promote ground water stewardship programs. Home*A*Syst and Farm*A*Syst for example are voluntary programs that help people assess environmental risks on their property and find technical support for making needed changes. The Internet has dozens of sites devoted to ground water stewardship programs that are tailored various age groups. 4H clubs in the area may be interested in undertaking water protection activities as a service project. The County Extension office is a resource for workshops devoted to topics like septic tank maintenance and household use of pesticide, herbicides and fertilizer that would be useful in a rural neighborhood.

Partnerships with state and local agencies, any businesses in the capture zone and neighboring landowners should also be established. Some of them may not be aware that their property is in a sensitive area where household, agricultural or business practices could have a negative impact on water quality for the whole community.

Because part of the delineated capture zone for the well may be outside the direct jurisdiction of Comeback Bay Water Association, working with the Bonner County Planning and Zoning board and other public drinking water systems drawing from the Sagle Aquifer to establish a wellhead protection overlay zone is probably the most effective way to prevent contamination due to land use changes in the area. Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

^{*}High - Indicates source automatically scored as high susceptibility due to presence of a potential source of contamination within the Sanitary Setback zone.

Assistance

Public water suppliers and users may call the following IDEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the IDEQ office for preliminary review and comments.

Coeur d'Alene Regional DEQ Office (208) 769-1422

State IDEQ Office (208) 373-0502

Website: http://www.deq.state.id.us

Water suppliers serving fewer than 10,000 persons may contact Melinda Harper, Idaho Rural Water Association, at (208) 343-7001 for assistance with wellhead protection strategies.

References Cited

Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 1997. "Recommended Standards for Water Works."

Idaho Department of Agriculture, 1998. Unpublished Data.

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Idaho Division of Environmental Quality, 1996. Lower Payette River Agriculture Irrigation Water Return Study and Ground Water Evaluation, Payette County, Idaho. Water Quality Status Report No. 115.

Idaho Department of Environmental Quality, 1997. Design Standards for Public Drinking Water Systems. IDAPA 58.01.08.550.01.

Idaho Department of Water Resources, 1993. Administrative Rules of the Idaho Water Resource Board: Well Construction Standards Rules. IDAPA 37.03.09.

J-U-B Engineers, Inc., 2001. Steady State Simulation of Nutrient and Contaminant Transport in the Southside Aquifer Near Sagle, Idaho.

Natural Resource Conservation Service, 1991. Idaho Snake-Payette Rivers Hydrologic Unit Plan of Work. March 1991.

United States Geological Survey, 1986. Quality of Ground Water in the Payette River Basin, Idaho. United States Geological Survey. Water Resources Investigation Report 86-4013.

University of Idaho. 1986. Ground Water Resources in a Portion of Payette County, Idaho. Idaho Water Resources Research Institute. University of Idaho. Moscow, Idaho. April 1986.

Attachment A

Comeback Bay Water Association Susceptibility Analysis Worksheets

Ground Water Susceptibility

Public Water System Name : COMEBACK BAY WAT	ER ASSN Source: S	outh Well			
Public Water System Number: 1090022	4/17/02 10:0	09:16 AM			
1. System Construction		SCORE			
Drill Date	5/14/71				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES 2001				
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	CASING YES, SEAL NO	1			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		2			
2. Hydrologic Sensitivity					
Soils are moderately drained	YES	1			
Vadose zone composed of gravel, fractured rock or unknown	NO	0			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	YES	0			
Total Hydrologic Score		2			
		IOC	VOC	SOC	Microbia
3. Potential Contaminant / Land Use - ZONE 1A (Sanitary Seth	pack)	Score	Score	Score	Score
Land Use Zone 1A	SUBURBAN	1	1	1	1
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		1	1	1	1
Potential Contaminant / Land Use - ZONE 1B (3 YR. TOT)					
Contaminant sources present (Number of Sources)	YES	1	1	1	1
(Score = # Sources X 2) 8 Points Maximum		2	2	2	2
Sources of Class II or III leacheable contaminants or Microbials	YES	1	1	1	
4 Points Maximum		1	1	1	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		3	3	3	2
Potential Contaminant / Land Use - ZONE II (6 YR. TOT)					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Land Use Zone II	Less than 25% Agricultural Land	0	0	0	
Potential Contaminant Source / Land Use Score - Zone II		0	0	0	0
Potential Contaminant / Land Use - ZONE III (10 YR. TOT)					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of Zone	NO	0	0	0	
Total Potential Contaminant Source / Land Use Score - Zone III		0	0	0	0
Cumulative Potential Contaminant / Land Use Score		4	4	4	3
4. Final Susceptibility Source Score		5	5	5	5
* · · · ·					

Ground Water Susceptibility

Public Water System Name: COMEBACK BAY WATER ASSN Source: NORTH WELL

Public Water System Number: 1090022 4/17/02 10:32:23 AM

Public Water System Number: 1090022	4/17/02 10:32:23 AM				
1. System Construction		SCORE			
Drill Date	8/16/73				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES 2001				
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	CASING YES SEAL NO	1			
Highest production 100 feet below static water level	YES	0			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		2			
2. Hydrologic Sensitivity					
Soils are moderately drained	YES	1			
Vadose zone composed of gravel, fractured rock or unknown	NO	0			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	YES	0			
Total Hydrologic Score		2			
		IOC	VOC	SOC	Microbial
3. Potential Contaminant / Land Use - ZONE 1A (Sanitary Setback)		Score	Score	Score	Score
Land Use Zone 1A	SUBURBAN	1	1	1	1
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A GENERATOR WITH	OUT SECONDARY CONTAINMENT	NO	YES	YES	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A	Total Potential Contaminant Source/Land Use Score - Zone 1A				1
Potential Contaminant / Land Use - ZONE 1B (3 YR. TOT)					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2) 8 Points Maximum		0	0	0	0
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		0	0	0	0
Potential Contaminant / Land Use - ZONE II (6 YR. TOT)					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Land Use Zone II	Less than 25% Agricultural Land	0	0	0	
Potential Contaminant Source / Land Use Score - Zone II		0	0	0	0
Potential Contaminant / Land Use - ZONE III (10 YR. TOT)					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of Zone	NO	0	0	0	
Total Potential Contaminant Source / Land Use Score - Zone III		0	0	0	0
Cumulative Potential Contaminant / Land Use Score		1	1	1	1
4. Final Susceptibility Source Score		4	4	4	4
5. Final Well Ranking		Low	High	High	Low

POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

<u>AST (Aboveground Storage Tanks)</u> – Sites with aboveground storage tanks.

<u>BML</u> (<u>Business Mailing List</u>)— This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

<u>CERCLIS</u> – This includes sites considered for listing under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). CERCLA, more commonly known as Superfund is designed to clean up hazardous waste sites that are on the national priority list (NPL).

<u>Cyanide Site</u> – DEQ permitted and known historical sites/facilities using cyanide.

<u>Dairy</u> – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

<u>Deep Injection Well</u> – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

<u>Group 1 Sites</u> – These are sites that show elevated levels of contaminants and are not within the priority one areas.

<u>Inorganic Priority Area</u> – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

<u>Landfill</u> – Areas of open and closed municipal and non-municipal landfills.

<u>LUST (Leaking Underground Storage Tank)</u> – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

<u>Mines and Quarries</u> – Mines and quarries permitted through the Idaho Department of Lands.)

<u>Nitrate Priority Area</u> – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System)

 Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

<u>Closed Or Open UST (Underground Storage Tank)</u> – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

<u>Wastewater Land Applications Sites</u> – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

<u>Wellheads</u> – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.